

CMS, 13 TeV, AK4 jets, central dijet region, $254 < p_T^{\text{dijet}} < 326$ GeV
 Rivet 4.1.0, ≥ 100 k events
 mcplots.cern.ch [arXiv:1306.3436]
 (CMS_2021_I1920187)

The top panel shows the differential cross-section $\frac{1}{\#} \frac{dN}{dp_T d\lambda}$ on a logarithmic scale (from 10^{-1} to 10^2) versus groomed p_{TD2} on a linear scale (from 0 to 1). The data points (black squares) show a peak around $p_{TD2} \approx 0.1$. The Pythia models (Pythia 6.428 370, Pythia 6.428 391, Pythia 6.428 default, and Pythia 8.315 default) are shown as lines with markers, generally following the data trend but with some deviations at low p_{TD2} .

The bottom panel shows the ratio of the groomed p_{TD2} distribution to the CMS data on a linear scale (from 0.5 to 2) versus groomed p_{TD2} on a linear scale (from 0 to 1). The ratio is close to 1 for $p_{TD2} > 0.2$, indicating good agreement with the data. The shaded regions (yellow and green) represent the uncertainty bands for the ratio.

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